

CLAIMS

1. A handheld device comprising:

a) a first audio source coupled to a first variable

5 attenuator/amplifier;

b) a second audio source coupled to a second variable

attenuator/amplifier;

c) a priority logic unit for assigning priority levels
to coupled to said first audio source and said second audio
source, and also coupled to said first variable
attenuator/amplifier and said second variable
attenuator/amplifier;

d) a mixer coupled to said first variable
attenuator/amplifier and to said second variable
attenuator/amplifier; and,

e) an audio output connected to said mixer.

2. The handheld device of claim 1 wherein said first

audio source is a signal event source and said second audio

20 source is a continuous audio source.

3. The method of claim 1 wherein said handheld device
comprises more than two audio sources.

4. The handheld device of claim 1 wherein said first audio source is a continuous audio source and said second audio source is a continuous audio source.

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5. The handheld device of claim 1 wherein said first audio source is a signal event audio source and said second audio source is a signal event audio source.

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10 6. The hand held device of claim 1 wherein said priority logic unit comprises an analog to digital conversion capability.

15 7. The handheld device of claim 5 wherein said priority logic unit further comprises a memory buffer capable of storing a portion of a signal from one of said first audio source and said second audio source.

20 8. The handheld device of claim 1 wherein said output consists of a single stereophonic channel.

9. The handheld device of claim 1 wherein said first audio source is a wireless broadcast.

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10. The handheld device of claim 1 wherein said first audio source is a storage medium.

5 11. The handheld device of claim 10 wherein said first audio source is a digital storage medium.

10 12. The handheld device of claim 11 wherein said digital storage medium is a flash memory.

13. The handheld device of claim 10 wherein said storage medium is a removable storage medium.

14. A method for prioritizing audio sources and
15 balancing a combined audio output in a handheld device comprising the steps of:

- a) establishing priority for a signal from a first audio source and a signal from a second audio source;
- b) adjusting the level of the signal from at least one of said first audio source and said second audio wherein said level is determined by said priority; and,
- c) combining the signal from said first audio source with the signal from said second audio source; and

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d) rendering available a resultant signal from said step
c).

15. The method of claim 14 wherein the step of
5 adjusting the level of one of said first audio source and
said second audio source is done in accordance with a
predetermined ratio.

10. The method of claim 15 wherein the signal of only
one audio source is adjusted.

15. The method of claim 14 wherein said priority is
dependent upon the level of at least one of said signal from
a first audio source and said signal from a second audio
source.

18. A method of generating an audio signal in a
portable computer system comprising the steps of:
a) generating a first audio signal from a first source;
b) generating a second audio signal from a second
20 source, wherein said second audio signal is of a lower
priority than said first audio signal;

c) attenuating said second audio signal to generate an
attenuated second audio signal;

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d) combining said first audio signal and said attenuated second audio signal to generate a combined audio signal; and
e) rendering audible said combined audio signal.

5 19. A method as described in Claim 18 further comprising the step of assigning priority to said first audio signal and said second audio signal.

20. A method as described in Claim 18 wherein said first audio signal is an alert tone and wherein said second audio signal is music.

21. A method of generating an audio signal in a portable computer system comprising the steps of:

15 a) generating a first audio signal from a first source;
b) generating a second audio signal from a second source, wherein said second audio signal is of a lower priority than said first audio signal;
c) amplifying said first audio signal to generate an amplified first audio signal;

20 d) combining said amplified first audio signal and said second audio signal to generate a combined audio signal; and
e) rendering audible said combined audio signal.

25 22. A method as described in Claim 21 further comprising the step of assigning priority to said first audio signal and said second audio signal.

23. A method as described in Claim 21 wherein said first audio signal is an alert tone and wherein said second audio signal is music.

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24. A product having a computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform the steps prioritizing audio sources and balancing a combined audio output in a handheld device comprising:

a) establishing priority for a signal from a first audio source and a signal from a second audio source;

b) adjusting the level of the signal from at least one of said first audio source and said second audio wherein said

15 level is determined by said priority; and,

c) combining the signal from said first audio source with the signal from said second audio source; and

d) rendering available a resultant signal from said step

c).

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25. The product of claim 24 wherein the computer readable medium further includes instructions for performing the step of adjusting the level of one of said first audio

source and said second audio source is done in accordance
with a predetermined ratio.

26. The product of claim 25 wherein the computer
5 readable medium further includes instructions for adjusting
only one audio source.

27. The product of claim 24 wherein said priority is
dependent upon the level of at least one of said signal from
10 a first audio source and said signal from a second audio
source.